ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time: September 22, 2005 / 10:00 a.m.

Site Contact(s): K-H Karen Wiemelt, Susan Serreze

Phone: 303-692-2035 – CDPHE
303/312-6312 - EPA
303/966-4226 – DOE

Agency: CDPHE: Harlen Ainscough, Dave Kruchek,
EPA: Sam Garcia, Larry Kimmel, Todd Bechtel
DOE: Norma Castañeda

Purpose of Contact: A meeting was held on September 22, 2005 to discuss the IHSS Group NE-1 Ponds Data Summary Report, IHSS Group 000-2 OPWL Closeout Report, and IHSS Group 000-4 NPWL Closeout Report.

Discussion: See meeting minutes below.

Contact Record Prepared By: Susan Serreze

September 22, 2005 Comment Resolution Meetings
For
IHSS Group NE-1 Ponds Data Summary Report
IHSS Group 000-2 OPWL Closeout Report
IHSS Group 000-4 NPWL Closeout Report

A meeting was held on September 22, 2005 to discuss the IHSS Group NE-1 Ponds Data Summary Report, IHSS Group 000-2 OPWL Closeout Report, and IHSS Group 000-4 NPWL Closeout Report.

Attendees

CDPHE: Harlen Ainscough, Dave Kruchek
EPA: Sam Garcia, Larry Kimmel, Todd Bechtel (Greystone)
K-H Team: Karen Wiemelt, Gary Carnival, Annette Primrose, Greg Pudlik, Susan Serreze

II. Report Status

Issues

1
13

No Sitewide issues were discussed.

Specific Comments

IHSS Group NE-1 Ponds Data Summary Report

The attached written comments were received from CDPHE and EPA. The following resolutions were agreed to:

- Additional information on the overall ecological health of the ponds will be added to Appendix A.
- An explanation of the difference between HQ and HI will be added to Appendix A.
- An explanation of the screening level HQ will be added to Appendix A.
- All other comments will be addressed.

IHSS Group 000-2 OPWL Closeout Report

The attached written comments were received from CDPHE. The following resolutions were agreed to:

- Institutional controls will be addressed in the CAD/ROD.
- Tank 31 was not found in historical records or in the field. Additionally, the OPWL leading to the tank was not found. Additional text will be added to clarify Tank 31.
- All other comments will be addressed.

IHSS Group 000-4 NPWL Closeout Report

The attached written comments were received from CDPHE. The following resolutions were agreed to:

- Radiological survey data will be included for valve vaults left in place.
- All other comments will be addressed.

Other Issues

There were no other issues for discussion.

V. Meetings

The next meeting will held on September 28, 2005 at 2:00 PM in the Breckenridge Room.

Colorado Department of Public Health and Environment

Hazardous Materials & Waste Management Division

Comments

Draft Data Summary Report
for
IHSS Group NE-1

(IHSS NE-142.1 –Pond A-1
IHSS NE-142.2 –Pond A-2
IHSS NE-142.3 –Pond A-3
IHSS NE-142.4 –Pond A-4
IHSS NE-142.12 –Pond A-5
IHSS NE-142.8 –Pond B-4
IHSS NE-142.9 –Pond B-5
IHSS NE-142.10 –Pond C-1
IHSS NE-142.11 –Pond C-2)

September 2005

Specific Comments:

1. **Section 2.0:** Somewhere within Section 2.0, or a new or existing subsection, please discuss the consultative process meetings and information, i.e., pond surface topography, flow path, water depth etc., supplemented with site visits with regulators, were used to select sampling locations, sample depths and COCs. It is important to reflect the efforts made to sample at locations where potentially contaminated sediments were most likely to have been deposited to demonstrate sampling adequacy.

2. **Section 2.1.1:** On page four, last sentence, "...become the pond" should read "...became the pond."

3. **Section 2.2.5:** On page 66, second sentence of the section, "colleted" should read "collected".

4. **Section 2.2.6:** This section should reflect that the pu239/240 exceedance occurred within the C-interval sampling increment, 2.5 feet abbreviated to 3.9 feet, but that an additional sample collected from 1-3 feet, plus the previous A and B sample intervals, showed less than the WRW AL from 0-3 feet in depth.

5. **Section 2.2.7:** On page 71, third paragraph, end of second line, "...more than have" is intended to read "... more than half". Please correct.

6. **Section 4.0:** In Screen 1, please add the clarification noted in Comment No. 4. This is necessary to clearly reflect that the 2.5-3.0 foot portion of the Pu 239/240 exceedance does not require accelerated action, but is appropriate to consider as subsurface soil/sediment in the SSRS.

7. **Screen 2**: Please delete the "at" preceding "currently".

8. **Screen 4:** The statement in the last paragraph, page 88, regarding routine sampling prior to release, is not applicable and is inappropriate in respect to Pond C-1 recently reconfigured as a flow-through pond. In addition, each of the metals listed in Table 16, are present in Pond C-1 samples above background (WRW thresholds are irrelevant) in one or more 0.0-0.5 foot sampling increments. Further, other COCs not listed in Table 16, exceed background values or reporting limits in Pond C-1 sediment. Therefore, please discuss the COCs in respect to surface water standards (e.g., the relative level of probability of a exceedance of a surface water standard) and relative to planned surface water monitoring activities designed to ensure that any exceedances that might occur will be detectable. If Table 16, and discussion relative to WRWs, is retained, please indicate that such is provided for comparative purposes only.

9. **Section 5.1:** Since the first paragraph introduces the bullets that follow, please delete the bullet associated with this paragraph.

10. **Section 5.2.1:** Please discuss, briefly, the significance of ESL HQs of less than 10 compared to human health HQs greater than 1 being significant, (This reviewer weighs less than 1000 pounds, but 205 may still be a unacceptable risk.)

11. **Section 5.2.7:** The reference to Pond A-4 in the last sentence should be changed to Pond B-5.

12. **Section 6.0:** Please reflect the response to Comment No. 8, in the second bullet.

13. **Section 7.2.1, Sample Matrix Spike Evaluation:** It is unclear why 2,4-Dinotrophenol, etc., are specified when other constituents, like antimony, exhibiting lower minimum recoveries were reported in the table. If due to the three constituents failing the numerical test, please provide further criteria used to support the determination that project decisions were not affected. For example, process knowledge or lack of detection in actual samples. Please also verify the correctness of the negative values for iron and manganese.

14. **Section 7.2.2:** Please rework the sentence.

15. **Field Duplicate Evaluation:** Considering the lack of EPA review criteria for field duplicates, it is unclear how the highest RPD values were reviewed and why, as a result, project decisions were not impacted. Please clarify.

16. **Section 7.3:** Limiting the summary discussion to RPD exceedances is inadequate. Please provide a complete and adequate summary.

Appendix A

1. **List of Tables:** There are thirty-six tables, not 34, and the list is off by a factor of 2. Actual Table 24 and 25, which includes PAHs, are not shown in the list.

2. **Executive Summary, Pond A-1:** On page ES-3, Please refer to Comment No. 10.

3. **Section 4.0:** On page 7, it is noted that AT values reflect upper bound concentrations above which adverse affects are possible. This aspect of ATs is not apparent from the discussion in the body of the report or the specific discussions, but should be discussed. Furthermore, some values above an AT-HQ of 1 are reported, but not once have these values been deemed to be significant or at a sufficient level to consider sediment removal actions to protect ecological resources. Mitigating factors, not just other lines of evidence, but perhaps habitat damage that would result from actions should be added to the justifications. For example, please explain the AT-HQ for silver, 1938, on Table A.33, Pond B-4, and other lesser exceedances of 1. (The silver AT-HQ is not discussed on page 32 of the Appendix.)

4. **Section 5.1.1, Chemical Risk Characterization – Further Analysis:** On page 13, please complete the sentence by adding any missing content or by removing the "and" that follows "Aroclor-1254".

5. **Other Lines of Evidence:** On page 15, please discuss (in this section is sufficient), the basis for and significance of the HIs in relation to the HQs. It is not apparent whether the HI values are provided to mitigate the high HQs or are informational only.

6. **Weight-of-Evidence Conclusions:** On page 16, fourth line of the section, it appears ", a "to" should be added after "found", i.e., "were found to have..." unless "where found" was intended.

7. In the second paragraph of the section, and subsequent, comparable sections, please specifically reference the "other studies". It would be acceptable to reference the attachment(s) if they summarize the studies.

8. **Section 5.1.3, Chemical Risk Characterization – Surface Sediment Screen Results:** At the top of page 23, please correct the reference to A8.30. Also, please clarify whether this is referencing a table or figure.

9. **Section 5.1.3, Chemical Risk Characterization – Further Analysis:** Also on page 23, second paragraph of the section, last sentence, "However, because...." is intended.

10. **Section 5.1.5:** On page 30, second paragraph of the page, "one-half" rather than "on-half" is intended.

11. **Section 5.2.1 Chemical Risk Characterization – Surface Sediment Screen Results:** On page 38, second paragraph, please compare the Aroclor-1254 value to the distinct ESL (show the actual HQ value) in addition to the total PCB ECL. By convention, it should be discussed first, and then summarized if warranted, in the Weight of Evidence Conclusions.

12. **Tables A.8, A.9 and A.11:** Please adjust the tables to include the standard deviation column on the same page, or show the Analyte column alongside the SD column.

13. **Table A.22:** Please complete the endnote on page 2 of 2.

14. **Tables A.29:** Please adjust the table to include the Sediment HQ column on the same page, or show the ECOPC column alongside the HQ column.

15. **Figure A.18:** The figure lacks data; if all locations were non-detect, please add.

16. **Attachment 1:** Please remove the K-H review page, which follows the references, from the document.

EPA Comments for Data Summary Report
IHSS Group NE-1, Pond Summary
September 2005

September 15, 2005

Specific Comments

1. **Section 2.1.1, page 4, paragraphs 1 and 4.** Add drainages, 800 Area and 900 Area, SID, and other referenced features to Figure 1.

2. **Section 2.1.1, page 4, paragraph 2, last sentence.** When was all sediment removed from referenced ponds?

3. **Section 2.2, page 8, paragraph 1.** Please clarify meaning of "nearly demolition" or rewrite sentence.

4. **Table 3, page 20.** Page contains table title, but no table (unintended blank page).

5. **Section 2.2.1, page 58, paragraph 1.** Second sentence appears to contain a typographical error that makes the sentence meaning unclear ("and, while on").

6. **Section 4.0, page 88, paragraph following Table 16.** This paragraph states that Table 16 shows that results are "only slightly greater than background or RLs", but RLs are not shown in Table 16. Please consider including RLs in the table.

7. **Section 4.0, page 89, paragraph 2, last sentence.** Please provide or reference the basis for statement that "potential groundwater impacts...would occur before surface water left the Site."

8. **Section 7.2.1 and 7.2.2, pages 96 through 116, table references.** The references in the text for tables 17 through 24 are off by six. For example, Table 17 is introduced in the text as Table 11, and Table 24 is introduced as Table 18.

9. **Section 7.2.2, page 115, paragraph 1.** Paragraph states that "project decisions were not impacted" by inadequate field duplicates (last sentence), but does not provide a rationale. Please provide a rationale for the statement.

10. **Section 7.2.3, page 117, paragraph 2.** As stated, Table 25 shows that the overall ER Program goal of 25 percent validation of analyses was met. However, this validation goal was not met for analysis of total radionuclides (17.29%). Please explain the significance of the validation percentage for total radionuclides analyses.

7

11. **Table 25, page 119.** Page 119 is an "orphan" of Table 25 on Page 118 (contains only one line of notes). Please fit Table 25 and notes onto one page for better presentation and clarity.

12. **Section 7.3, page 120, paragraph 1.** Paragraph states that "RPDs greater than 35 percent indicate the sampling precision limits of some analytes have been exceeded; however, data...are adequate for decision making" but does not provide a rationale. Please provide a rationale for the statement.

CDPHE
OPWL Comments:

1) Page ES-2, last paragraph – There should be institutional controls to prevent digging or exposure of the remaining contamination and contaminated lines. Please correct this statement.
2) Page ES-2, 2nd set of bullets, 4th bullet – Please change the word "eliminating" to better reflect the remaining contamination. Should change to "reducing", or similar adjective.
3) Page 9, Tank 31 – Please provide more specific discussion as to the presence or existence of this Tank. As shown on figure 1, the line to this tank did not exist. Do not understand the relevance to it not being discussed in the RLCR or OU 9. Please provide actual information rather than non-information. Did it exist or not? When was it removed? Is it still there? If it is still there, what needs to be done to investigate its condition?
4) Page 16, Tanks 9 & 10 – Please provide the missing "above discussion on IHSS 700-144(N) and 700-144(S)".
5) Page 68, middle of 2nd paragraph – please modify to identify that the levels being discussed are for plutonium.
6) Page 80, last sentence of last paragraph – please modify to reflect the correct area of interest. (not 100/400).
7) Fig 11 – Please show the data exceedances in red.
8) Page 159, last paragraph – Please provide the correct figure # as Fig 5 does not appear to show the area of interest. (Fig 7?)
9) Figures 7 & 8 – please show the removed section of P-13 as removed (green) rather than as a gap in the remaining line.
10) Page 160, 1st paragraph – Please expand the discussion regarding P-12. Why were no other attempts made to find it? Does this line exist? What is the current condition of P-12?
11) Page ES-2 – Two bullets on this page state that all valve pits and manways have been removed. Yet in Section 4.2.1 it is stated that two valve pits were not removed and remain in place, and other valve pits were not located. As such please modify this statement to properly reflect the actual disposition of the valve pits, and the "elimination" of these as potential sources of future contamination.
12) Figure 8, and all appropriate figures. As stated in Section 4.2.1, please show the valve pits that remain and have not been removed.
13) Section 4.2.10 – Please change this discussion to actually discuss the 776/777/778 actions, rather than the 771/774 actions as currently included.
14) Section 4.2.13, 2nd paragraph – Please modify this discussion to clarify the location of the "connecting tunnel" between the tank pit in the SE corner of B779 and the NW corner of B728. We are not aware of such an extensive tunnel. Perhaps it should be 782 rather than 728.
15) Section 4.2.14, OPWL P-27–29 – This discussion regarding P-29 not being found does not agree with that shown on Figure 8. Fig 8 identifies the line not found as P-27, not P-29. Please modify as appropriate.

16) Page 167, last paragraph – Please modify this to properly identify the OPWL being discussed. Currently this indicates it is P-37, which was previously discussed, yet P-41 is also indicated. However, on Fig 8, the line being discussed appears to be P-45.
17) Page 168, 2nd paragraph – Please properly identify the "two P-42 OPWLs" being discussed. These are shown on Figure 8 as P-43 and P-44.
18) Page 168, OPWL P-61 – P-61 is not shown on Fig 8. However, there is a P-46 and a P-35, please properly identify the OPWL being discussed.
19) Section 4.2.14 – Please change all references to Figure 11 to Figure 8.
20) Section 5.2.1, Page 181, B881 – Please add discussion of the disposition of the OPWLs associated with B881. All removed, except for a segment through the wall of Rm 111 that was plugged.
21) Section 5.2.1, Page 200, B887 – Please add discussion of the disposition of the OPWLs associated with B887. This should be included in the discussion with B881.
22) Section 5.2.1, page 200, B889 – Please change the reference to fig 8 to fig 13.
23) Page 201, 4th paragraph – This discussion of P-6 states that the OPWL between the 889 MWC and MWN was removed; yet this is not shown on Fig 13. Please modify as appropriate.
24) Page 201, last paragraph – Please modify this 2nd P-6 discussion as necessary to properly address the lines associated with the 800 area, rather than the 700 area. It is also confusing to discuss OPWL P-6 north of the 889 MWN, when the figures provided for the 700 and 800 areas show the lines as P-11, P-12 and P-13. Please correct as necessary to properly address the appropriate lines.
25) Page 202, next to last paragraph – It is my understanding that at least a segment of one of these OPWLs was left in the south wall of B881, RM 111 and grouted. Possibly P-55?
26) Page 204, Section 6.1, 2nd paragraph – Please refer to the correct figure, based on the discussion. Fig 11 is not correct. Characterization results are provided on Fig 14 and confirmation on Fig 15.
27) Page 211, 5th paragraph – Please show this line on Figure 14, or provide a better description to properly identify this line on Figure 14. B991 or 995?
28) Page 250, Screen 1 – This discussion identifies several additional rad locations where levels above 50 pCi/g did not require remediation. Yet these were not all previously identified in the SOR Table 22. Please identify the source of these other samples and why they are not included in the SOR Table.
29) Page 253, 1st paragraph/bullet – As previously noted in above comments not all of the valve pits appear to have been removed. As such, please modify this statement accordingly.
30) Page 229, Matrix Spike Evaluation, and Table 31 – In addition to the effects of the 0 % recoveries, please include a discussion of the relative effects of the negative results for Acetone, Chloroform, Naphthalene, Tetrachloroethlene, and Xylene.
31) Page 258 – Please complete the conclusion descriptions, specifically the 2nd bullet. Also complete or expand the 1st bullet discussion to properly make a statement ("excavated" does not provide any rationale for justification). 3rd bullet

needs to be expanded to explain the contaminants left in place and why this is justification. 4th bullet needs to be modified as previously discussed.

CDPHE
NPWL Comments:

1) Why is there such a gap in the text on page 3?
2) In the ES it states that there have been 243 soil samples collected from 146 loc, yet in Sec 2.3 it states there were 151 sample loc., and in Table 2 it states 92 and 150 for a combined number of 243??? Please provide consistent numbers and support (check the math).
3) Page 40, Table 4 – Why is the data repeated? 100/400 - 800 again.
4) Table 9, 10, and general discussion – This appears to show that NPWLs and VV (including buildings) were left that exceeded the agreed upon rinsate levels for Rads, without providing rationale for these actions (as such please provide). Also, please provide the scan/survey information (and any other relevant info) that was used to calculate the amount of remaining rads in the VV as well as in the remaining lines.
5) Table 10 – Please show the loc of the three buildings included on the appropriate figures. Also, in the footnote regarding the buildings, it discusses "both" when appearing to refer to all three.
6) Section 4.3 – Only the 800 area activities are discussed. Please provide additional discussion regarding the other areas as included in Table 1.
7) Section 15 – Since the information provided indicates that rads remain associated with the remaining VV and NPWLs, please provide recognition of this and why it is not considered a concern. This should also be included and discussed in the text of this document.

Required Distribution:

M. Aguilar, USEPA
S. Bell, DOE-RFFO
J. Berardini, K-H
B. Birk, DOE-RFFO
L. Brooks, K-H ESS
M. Broussard, K-H RISS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFFO
C. Deck, K-H Legal
S. Gunderson, CDPHE
M. Keating, K-H RISS
G. Kleeman, USEPA
D. Kruchek, CDPHE
D. Mayo, K-H RISS
R. McCallister, DOE-RFFO
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFFO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFFO
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

13/13